Carol Coles

From: Carol Coles
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To: *everyone; _Council Members; Andy Rieger; Denise Holder; Eddie Sims; Jane Cannon; KGOU; KOCO; KOKH; Ktok; KTOK; Norman News; Oklahoma Daily
Subject: Partnership Seeks Brookhaven Creek Improvements

City of Norman
201 West Gray
Norman, Oklahoma 73069

Press Release

For Immediate Release

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Partnership Seeks Brookhaven Creek Improvements

Flooding on some city streets is nothing new to Norman residents. While not a frequent flood prone area, Brookhaven Creek at Crossroad Boulevard overtops during relatively large rain events. This is a potential safety issue if the road becomes impassable and an economic one if the crossing structure is damaged. In order to manage storm water in urban areas conventional engineering has turned to concrete channels and mowed grass detention ponds to store and convey storm water. These practices are expensive, provide no wildlife habitat, and offer virtually no water quality benefits. However, low impact development alternatives to these traditional storm water management techniques do exist.

As a solution to this problem the Oklahoma Conservation Commission (OCC) is partnering with the City of Norman and the non-profit organization Watershed Restoration Incorporated (WRI) through a U.S. Environmental Protection Agency grant to demonstrate the application of alternatives for storm water storage and conveyance on Brookhaven Creek. The principles of fluvial geomorphology (FGM) will be used to rehabilitate the steam with more natural techniques as an alternative to concrete and mowed detention ponds. The design will allow the stream to convey its water and sediment load, while lowering the flood stage elevation and maintaining aquatic, riparian and wetland resources along the stream course. The project location includes the main stem of Brookhaven Creek between Crossroads Boulevard and just north of Rock Creek Road. Phase 1 of this project consists of ten rock riffles along the flow line of Brookhaven Creek between Rock Creek Road and Crossroads Blvd.

The contractor is Central Contracting Services. Construction of Phase 1 will begin on Monday, August 16, 2010 and be completed by mid September 2010. Phase 2 consists of tree and shrub planting along the creek with wetland plantings in the wetlands area north of Rock Creek Road. The wetlands planting will be accomplished in October and November 2010 and the tree and shrub planting will be accomplished from late November 2010 into December and possibly January 2011.

The project will enhance the existing stream reach and riparian corridor and develop wetland habitat associated with a storm water retention structure. A series of rock riffles will be installed mimicking a natural stream's sequence of shallow riffles and deeper pool areas. These rock riffles will serve several functions including stream grade and elevation control, habitat for aquatic species, and stream crossing points for maintenance along the channel. Additionally, trees and shrubs will be planted along the banks of the stream creating a riparian zone that

will provide bank stability, storm water filtration, and shade to cool stream water for aquatic life.

The water storage portion of this project is associated with the storm water storage requirements associated with the Interstate-35 overpass along Rock Creek Road. The originally designed grass detention pond has been redesigned into a retention pond with the benefit of wetland functions that will improve water quality. The original structure has been redesigned to retain water for the majority of the year, and the banks will be sloped and graded to develop a diverse wetland habitat. Native wetland species will be selected and planted in the appropriate hydrologic conditions. The wetland fringe will also be planted with tree and shrub species. The planting design will take into account a balance between open space and a wooded buffer.

The design of the wetland retention structure and the enhanced stream corridor will provide empirical evidence that there are functional low impact development alternatives when designing these structures and channels. In addition, a trail system is proposed along the creek and around the wetland retention pond to expose the general public to the different approaches. The plan is to develop a combination maintenance corridor and greenway trail system from the Robinson Street bridge to the Rock Creek Road retention structure. Ultimately, the trail would become part of the City's greenway system. Providing maintenance access will allow the City to have the capability to clean out debris and log jams while maintaining habitat along the stream corridor. Through education and demarcation, City crews will have direction on how to properly maintain the channel while maintaining an intact riparian corridor. Again, this project will demonstrate that there are low impact alternatives to destructive mowing and clean-out practices commonly employed in urban settings.

If additional information is needed, please do not hesitate to contact Mr. Bob Hanger, Storm Water Engineer, City of Norman Public Works Department at 405-366-5453 or Mr. Chris DuBois, Oklahoma Conservation Commission at 405-522-4733.